

10/551,014

=> d his

(FILE 'HOME' ENTERED AT 13:42:38 ON 02 MAR 2009)

FILE 'REGISTRY' ENTERED AT 13:47:16 ON 02 MAR 2009

L1	1	S	OLANZAPINE/CN
L2	97	S	132539-06-1/CRN
L3	6436	S	FUMARATE
L4	3781	S	MALONATE
L5	9387	S	MALEATE
L6	381361	S	METHANOL
L7	42708	S	NICOTINAMIDE
L8	8879	S	PROPYLENE GLYCOL
L9	1	S	FUMARATE/CN
L10	1	S	MALONATE/CN
L11	1	S	MALEATE/CN
L12	1	S	METHANOL/CN
L13	1	S	NICOTINAMIDE/CN
L14	1	S	PROPYLENE GLYCOL/CN
L15	90	S	156-80-9/CRN
L16	181	S	18610-42-9/CRN
L17	19568	S	67-56-1/CRN
L18	424	S	98-92-0/CRN
L19	14565	S	57-55-6/CRN
L20	1	S	L2 AND L19
L21	3	S	L2 AND L18
L22	3	S	L2 AND L17

FILE 'CAPLUS' ENTERED AT 13:53:35 ON 02 MAR 2009

L23	2716	S	L1
L24	71	S	L2
L25	31427	S	L3 OR L9
L26	82	S	L15
L27	344	S	L16
L28	65385	S	L17
L29	447	S	L18
L30	79103	S	L19
L31	190	S	L9
L32	353	S	L10
L33	88	S	L11
L34	163986	S	L12
L35	11067	S	L13
L36	33314	S	L14
L37	2729	S	L23 OR L24
L38	141	S	L37 AND L25
L39	0	S	L37 AND L26
L40	0	S	L37 AND L27
L41	76	S	L37 AND L28
L42	5	S	L37 AND L29
L43	77	S	L37 AND L30
L44	0	S	L37 AND L31
L45	0	S	L37 AND L32
L46	0	S	L37 AND L33
L47	30	S	L37 AND L34
L48	8	S	L37 AND L35
L49	23	S	L37 AND L36

10/551,014

FILE 'REGISTRY' ENTERED AT 14:02:45 ON 02 MAR 2009

L50	2 S L2 AND PROPANEDIOIC
L51	7 S BUTENEDIOATE AND L2
L52	3 S L2 AND METHANOL
L53	1 S PROPANEDIOL AND L2
L54	3 S PYRIDINECARBOXAMIDE AND L2
L55	16 S L50 OR L51 OR L52 OR L53 OR L54
L56	81 S L2 NOT L55

FILE 'CAPLUS' ENTERED AT 14:20:58 ON 02 MAR 2009

L57	17 S L55
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=> d ibib abs hitstr total

L57 ANSWER 1 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:328200 CAPLUS

DOCUMENT NUMBER: 146:344231

TITLE: Organic acid salts of olanzapine and their preparation

INVENTOR(S): Kozluk, Thomasz

PATENT ASSIGNEE(S): Pol.

SOURCE: PCT Int. Appl., 24pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2007032695	A1	20070322	WO 2006-PL25	20060504
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRIORITY APPLN. INFO.: PL 2005-377084 A 20050915

AB New salts which comprise salts of olanzapine and carboxylic acids selected from the group consisting of: maleic acid, fumaric acid, phthalic acid, benzoic acid, salicylic acid or acetylsalicylic acid, of olanzapine to acid ratio of 1:1, 1:2 or other are prepared New salts of olanzapine and monoesters of dicarboxylic acids obtained in reaction of olanzapine with anhydrides selected from the group consisting of maleic anhydride, phthalic anhydride and succinic anhydride are presented. Synthesis of new olanzapine salts comprises carrying out the reaction of olanzapine in organic solvents with the carboxylic acids. NMR, X-ray diffraction and IR data are given for the salts.

IT 861390-74-1P 929208-92-4P 929208-95-7P  
929208-98-0P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(carboxylic acid salts of olanzapine and their preparation)

RN 861390-74-1 CAPLUS

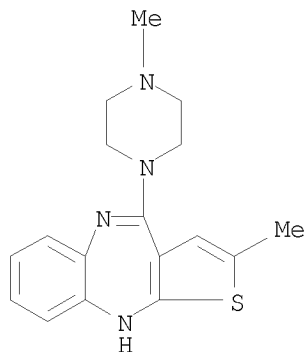
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (2:1) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

10/551,014

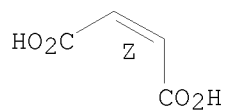


CM 2

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



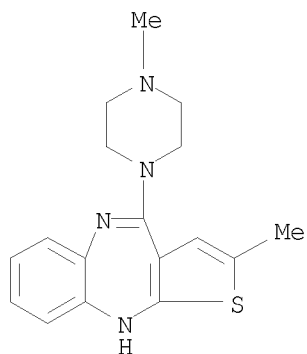
RN 929208-92-4 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (1:2) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

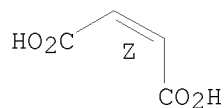


CM 2

10/551,014

CRN 110-16-7  
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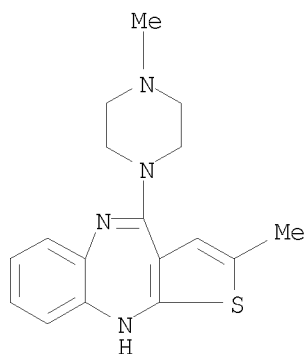
Double bond geometry as shown.



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CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2E)-2-butenedioate (1:2) (CA INDEX  
NAME)

CM 1

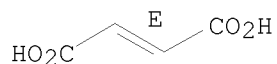
CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

CRN 110-17-8  
CMF C4 H4 O4

Double bond geometry as shown.

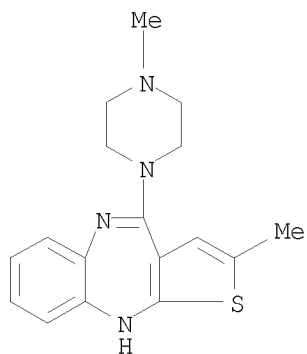


RN 929208-98-0 CAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2E)-2-butenedioate (1:3) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S

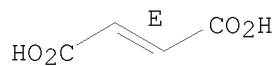
10/551,014



CM 2

CRN 110-17-8  
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 2 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:286797 CAPLUS  
 DOCUMENT NUMBER: 146:323378  
 TITLE: Pharmaceutical co-crystal compositions of drugs  
 INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Zaworotko, Michael J.; Moulton, Brian; Rodriguez-Hornedo, Nair  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 92pp., Cont.-in-part of U.S. Ser. No. 601,092.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070059356	A1	20070315	US 2005-546963	20050826
WO 2003074474	A2	20030912	WO 2003-US6662	20030303
WO 2003074474	A3	20031218		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20040019211	A1	20040129	US 2003-449307	20030530
US 7078526	B2	20060718		
WO 2004000284	A1	20031231	WO 2003-US19574	20030620
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
US 20050025791	A1	20050203	US 2003-601092	20030620
WO 2004078161	A1	20040916	WO 2003-US27772	20030904
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RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004061433	A1	20040722	WO 2003-US41273	20031224

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WO 2004063152 A2 20040729 WO 2004-US400 20040108  
 WO 2004063152 A3 20041111  
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 WO 2004078163 A2 20040916 WO 2004-US6288 20040226  
 WO 2004078163 A3 20050120  
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 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NA, NI  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,  
 BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,  
 MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
 GQ, GW, ML, MR, NE, SN, TD, TG

US 20060140985 A1 20060629 US 2005-541703 20050708  
 PRIORITY APPLN. INFO.: US 2002-384152P P 20020531  
 US 2002-390881P P 20020621  
 US 2002-426275P P 20021114  
 US 2002-427086P P 20021115  
 US 2002-429515P P 20021126  
 US 2002-437516P P 20021230  
 US 2003-439282P P 20030110  
 US 2003-444315P P 20030131  
 US 2003-451213P P 20030228  
 WO 2003-US6662 A 20030303  
 US 2003-456027P P 20030318  
 US 2003-463962P P 20030418  
 US 2003-449307 A2 20030530  
 US 2003-601092 A2 20030620  
 WO 2003-US19574 A 20030620  
 WO 2003-US27772 A 20030904  
 WO 2003-US41273 A 20031224  
 WO 2004-US6288 W 20040226  
 US 2002-360768P P 20020301  
 US 2003-439283P P 20030110  
 US 2003-441335P P 20030121  
 US 2003-378956 A 20030303  
 US 2003-456608P P 20030321  
 US 2003-459501P P 20030401  
 US 2003-486713P P 20030711  
 US 2003-487064P P 20030711  
 US 2003-637829 A 20030808  
 US 2003-660202 A2 20030911  
 WO 2003-US28982 A2 20030916  
 US 2003-508208P P 20031002



WO 2004-US400 W 20040108  
US 2004-542752P P 20040206

AB A pharmaceutical composition comprises a co-crystal of an active pharmaceutical ingredient (API) and a co-crystal former; wherein the API has at least one functional group, e.g., ether, alc., acid, amide, heterocyclic ring, etc., such that the API and co-crystal former are capable of co-crystallizing from a solution phase under crystallization conditions. Example cocrystals prepared are 1:1

celecoxib-nicotinamide and celecoxib-18-crown-6. Dissoln. was determined for a number of cocrystals. Also data for H-bonding functional groups with compds. such as amines, amides, and alcs. were given.

IT 922167-04-2P 929024-70-4P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(pharmaceutical co-crystal compns. of drugs)

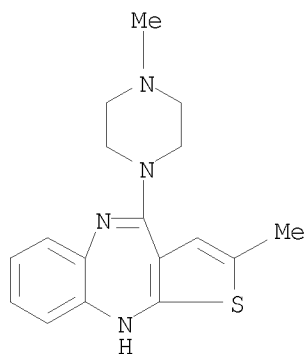
RN 922167-04-2 CAPLUS

CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

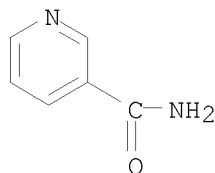
CMF C17 H20 N4 S



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



RN 929024-70-4 CAPLUS

CN 3-Pyridinecarboxamide, compd. with

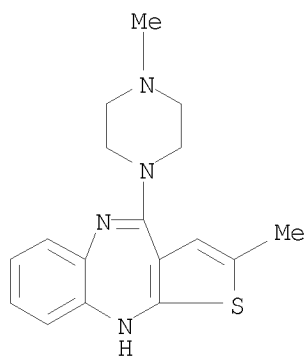
10/551,014

2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(2:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

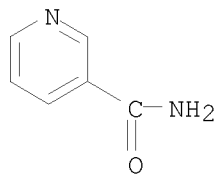
CMF C17 H20 N4 S



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



L57 ANSWER 3 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:159389 CAPLUS

DOCUMENT NUMBER: 146:316350

TITLE: Crystal structure of olanzapine and its solvates. Part 3. Two and three-component solvates with water, ethanol, butan-2-ol and dichloromethane

AUTHOR(S): Wawrzycka-Gorczyca, Irena; Borowski, Piotr; Osypiuk-Tomasik, Joanna; Mazur, Liliana; Koziol, Anna E.

CORPORATE SOURCE: Faculty of Chemistry, Department of Crystallography, Maria Curie-Sklodowska University, Lublin, 20-031, Pol.

SOURCE: Journal of Molecular Structure (2007), 830(1-3), 188-197

CODEN: JMOSB4; ISSN: 0022-2860

PUBLISHER: Elsevier B.V.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Crystalline solvates of olanzapine (1), 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, have been characterized by an X-ray anal. and thermal (DSC) data.

## Crystallization

of 1 from ethanol gives a solid containing both water and ethanol mols.; the solvate 1·H<sub>2</sub>O·EtOH (2:2:1) is monoclinic with the space group P2<sub>1</sub>/c and the unit-cell volume V = 3752.8(12) Å<sup>3</sup>. Butan-2-ol forms with 1 solvate which is also a three-component phase, 1·H<sub>2</sub>O·BuOH, but its stoichiometry is different (1:1:1). The space group for this crystal is P2<sub>1</sub>/c and the unit-cell volume V = 2216.5(7) Å<sup>3</sup>. Crystalline olanzapine dichloromethane solvate (2:1), 1·CH<sub>2</sub>Cl<sub>2</sub>, is triclinic with the space group P.hivn.1. The characteristic feature of all crystal structures is presence of a pair of olanzapine mols. which form dimer stabilized by multiple weak C-H···π interactions between the N-methylpiperazine fragment and the Ph / thiophene systems. Theor. calcns. have been performed indicating that the total C-H···π binding energy is about 8 kcal mol<sup>-1</sup>. In the crystal structure, the self-assembled olanzapine mol. dimers are arranged into parallel crystal planes. Packing of the layers proceeds in two ways in which structural motives are replicated by (i) perpendicular translation forming columns, and (ii) rotation around the twofold screw axis (parallel to the layer).

IT 182808-49-7

RL: PEP (Physical, engineering or chemical process); PROC (Process) (thermal desolvation; crystal structure olanzapine two- and three-component solvates with water, ethanol, butan-2-ol and dichloromethane)

RN 182808-49-7 CAPLUS

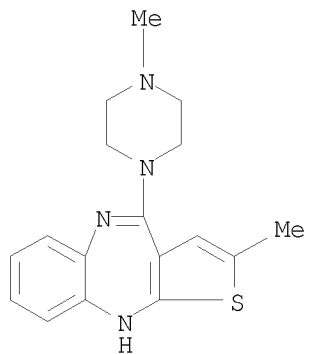
CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S

10/551,014



CM 2

CRN 67-56-1

CMF C H4 O

H<sub>3</sub>C—OH

REFERENCE COUNT:

38

THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 4 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2007:119077 CAPLUS  
 DOCUMENT NUMBER: 146:212835  
 TITLE: Pharmaceutical co-crystal compositions  
 INVENTOR(S): Almarsson, Orn; Bourghol Hickey, Magali; Peterson, Matthew L.; Zaworotko, Michael J.; Moulton, Brian; Rodriguez-Hornedo, Nair  
 PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of Michigan  
 SOURCE: U.S. Pat. Appl. Publ., 102 pp., Cont.-in-part of Appl. No. PCT/US03/27772.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20070026078	A1	20070201	US 2003-660202	20030911
US 6559293	B1	20030506	US 2002-232589	20020903
US 20030166581	A1	20030904	US 2002-295995	20021118
US 6699840	B2	20040302		
US 20030224006	A1	20031204	US 2003-378956	20030303
US 20040019211	A1	20040129	US 2003-449307	20030530
US 7078526	B2	20060718		
US 20050025791	A1	20050203	US 2003-601092	20030620
US 20040053853	A1	20040318	US 2003-637829	20030808
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AB A pharmaceutical composition comprising a co-crystal of an active pharmaceutical ingredient (API) and a co-crystal former; wherein the API has at least one functional group selected from ether, thioether, alc., thiol, aldehyde, ketone, thioketone, nitrate ester, phosphate ester, thiophosphate ester, ester, thioester, sulfate ester, carboxylic acid, phosphonic acid, phosphinic acid, sulfonic acid, amide, primary amine, secondary amine, ammonia, tertiary amine, thiocyanate, cyanamide, oxime, nitrile diazo, organo-halide, nitro, s-heterocyclic ring, thiophene, N-heterocyclic ring, pyrrole, O-heterocyclic ring, furan, epoxide, peroxide, hydroxamic acid, imidazole, pyridine and the co-crystal former has at least one functional group selected from amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, sulfone, sulfonyl, mercapto and Me thio, such that the API and co-crystal former are capable of co-crystallizing from a solution phase under crystallization conditions. Thus, 1:1 celecoxib:nicotinamide co-crystals were prepared by reacting celecoxib and nicotinamide in acetone solution

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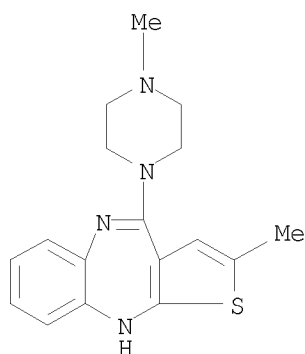
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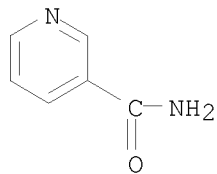
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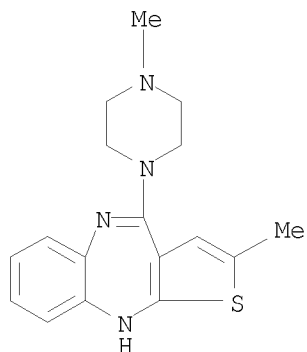
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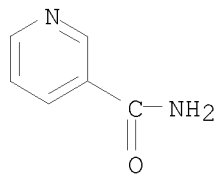
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L57 ANSWER 5 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2007:63611 CAPLUS  
 DOCUMENT NUMBER: 146:148846  
 TITLE: Pharmaceutical propylene glycol solvate compositions  
 and method for preparation thereof  
 INVENTOR(S): Tawa, Mark; Almarsson, Orn; Remenar, Julius  
 PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA  
 SOURCE: U.S. Pat. Appl. Publ., 33pp., Cont.-in-part of Appl.  
 No. PCT/US03/41273.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
 PATENT INFORMATION:

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AB The present invention provides a pharmaceutical composition comprising a propylene glycol solvate of a drug which is hygroscopic or has low aqueous solubility. It has surprisingly been found that by using propylene glycol to form a solvate of a hygroscopic drug, the hygroscopicity of the drug is decreased and/or the stability and aqueous solubility is increased. The drug is therefore much easier to formulate and store than its counterpart untreated or hydrated form.

IT 724433-99-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (pharmaceutical propylene glycol solvate compns. and method for preparation thereof)

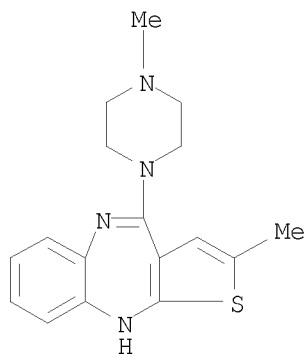
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CN 1,2-Propanediol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

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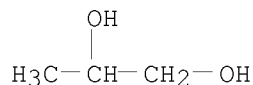
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L57 ANSWER 6 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1042253 CAPLUS

DOCUMENT NUMBER: 143:332562

TITLE: Synthesis of 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (olanzapine) and salts

INVENTOR(S): Mesar, Tomaz; Copar, Anton; Sturm, Hubert; Ludescher, Johannes

PATENT ASSIGNEE(S): Lek Pharmaceuticals D.D., Slovenia

SOURCE: PCT Int. Appl., 41 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

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WO 2005090359	A2	20050929	WO 2005-EP2876	20050317
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W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, AP, EA, EP, OA			
SI 21747	A	20051031	SI 2004-79	20040318
AU 2005223338	A1	20050929	AU 2005-223338	20050317
CA 2558654	A1	20050929	CA 2005-2558654	20050317
EP 1749010	A2	20070207	EP 2005-716177	20050317
R:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU			
BR 2005007584	A	20070703	BR 2005-7584	20050317
CN 101084222	A	20071205	CN 2005-80015935	20050317
IN 2006CN03389	A	20070615	IN 2006-CN3389	20060918
US 20080161557	A1	20080703	US 2006-598816	20061214
PRIORITY APPLN. INFO.:			SI 2004-79	A 20040318
			SI 2004-311	A 20041116
			WO 2005-EP2876	W 20050317

OTHER SOURCE(S): MARPAT 143:332562

AB The invention relates to a new process for the preparation of salts of olanzapine and transformation thereof into a pharmaceutically acceptable pure and discolored final product. The present invention also relates to new processes for the preparation of pure olanzapine. Thus, olanzapine was converted to its fumarate salt by reaction with fumaric acid in iso-PrOH.

IT 777081-25-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of olanzapine and salts)

RN 777081-25-1 CAPLUS

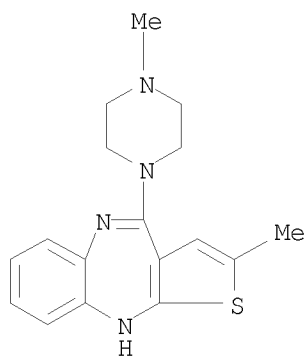
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,

10/551,014

2-methyl-4-(4-methyl-1-piperazinyl)-, (2E)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

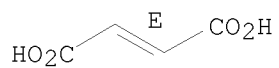
CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

CRN 110-17-8  
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT:

4

THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 7 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:696919 CAPLUS

DOCUMENT NUMBER: 143:194033

TITLE: Process for the synthesis of olanzapine, its intermediates, and acid addition salts thereof

INVENTOR(S): Keltjens, Rolf; Peters, Theodorus Hendricus Antonius

PATENT ASSIGNEE(S): Synthon B. V., Neth.

SOURCE: PCT Int. Appl., 22 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

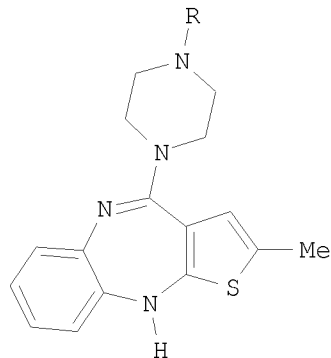
FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

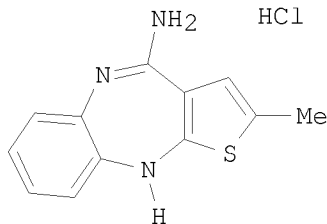
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005070939	A1	20050804	WO 2005-EP836	20050126
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1711503	A1	20061018	EP 2005-707056	20050126
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS				
US 20050272720	A1	20051208	US 2005-50851	20050127
PRIORITY APPLN. INFO.:			US 2004-539120P	P 20040127
			US 2004-562225P	P 20040415
			US 2004-569607P	P 20040511
			WO 2005-EP836	W 20050126

OTHER SOURCE(S): CASREACT 143:194033

GI



I



II

AB The invention relates to a process for preparing olanzapine (I; R = Me), which is an antipsychotic agent with anticholinergic activity. The invention also relates to the preparation of intermediates of olanzapine as well as its acid addition salts. Substitution of compound II (readily obtained by methods known in the art) with N-formylpiperazine in a dipolar aprotic solvent, such as a mixture of DMSO and toluene, resulted in the formation of N-formylolanzapine I (R = CHO). Purification of N-formylolanzapine by crystallization

followed by reduction with a reducing agent (either an aluminum hydride or hydrogen) gave olanzapine. The solution of olanzapine may be prepared in the presence of an acid to form the acid addition salt in essentially a single step. The acid can be organic or inorg., as long as it can form an isolatable solid salt with olanzapine. The process of the invention yields olanzapine with a greater purity than prior art, in part due to the facile crystallization of N-formylolanzapine as well as avoidance of dimerization

with piperazine or multiple methylation. The process also avoids the use of toxic or mutagenic methylation reagents without adding any further steps compared with previous processes.

IT 777081-27-3P 777081-28-4P

RL: SPN (Synthetic preparation); PREP (Preparation)

(olanzapine acid addition salts; process for the preparation of olanzapine

and

acid addition salts)

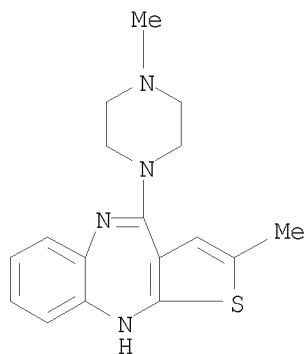
RN 777081-27-3 CAPLUS

CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

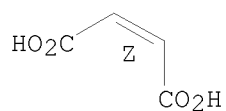
CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



10/551,014



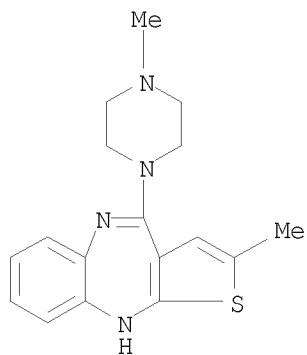
RN 777081-28-4 CAPLUS

CN Propanedioic acid, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

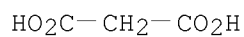
CMF C17 H20 N4 S



CM 2

CRN 141-82-2

CMF C3 H4 O4



REFERENCE COUNT:

4

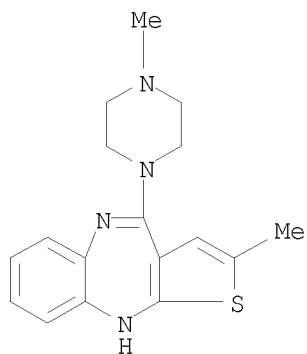
THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 8 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:696918 CAPLUS  
 DOCUMENT NUMBER: 143:179518  
 TITLE: Preparation of stable salts of olanzapine  
 INVENTOR(S): Keltjens, Rolf  
 PATENT ASSIGNEE(S): Synthon B.V., Neth.  
 SOURCE: PCT Int. Appl., 39 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005070938	A1	20050804	WO 2005-EP835	20050126
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
EP 1709053	A1	20061011	EP 2005-707055	20050126
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, FI, RO, CY, TR, BG, CZ, EE, HU, PL, SK, IS			
US 20050267099	A1	20051201	US 2005-50850	20050127
US 7329747	B2	20080212		
US 20050272721	A1	20051208	US 2005-50852	20050127
US 7459449	B2	20081202		
PRIORITY APPLN. INFO.:			US 2004-539120P	P 20040127
			US 2004-569607P	P 20040511
			WO 2005-EP835	W 20050126
AB	Several salts of olanzapine, including olanzapine malonate, olanzapine glycolate, olanzapine maleate, and olanzapine benzoate, have been found to have favorable solid state characteristics. To a clear solution of 5.0 g olanzapine base in 150 mL of acetone was added 1.67 g of malonic acid in 30 mL of acetone. The mixture was stirred at 40° for 3 h and the olanzapine hydrogenmalonate crystals were isolated by filtration, yield = 77%, m.p. 182-184°. Formulations of immediate-release tablets containing olanzapine are disclosed.			
IT	861390-69-4P 861390-73-0P 861390-74-1P RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (preparation of stable salts of olanzapine)			
RN	861390-69-4 CAPLUS			
CN	Propanedioic acid, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)			
CM	1			
CRN	132539-06-1			
CMF	C17 H20 N4 S			

10/551,014



CM 2

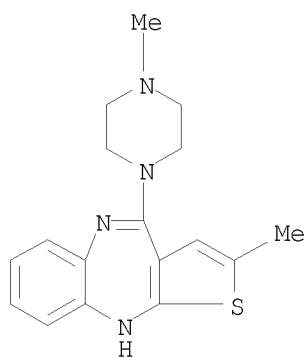
CRN 141-82-2  
CMF C3 H4 O4

HO<sub>2</sub>C—CH<sub>2</sub>—CO<sub>2</sub>H

RN 861390-73-0 CAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2E)-2-butenedioate (2:1) (CA INDEX  
NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S

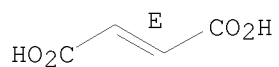


CM 2

CRN 110-17-8  
CMF C4 H4 O4

10/551,014

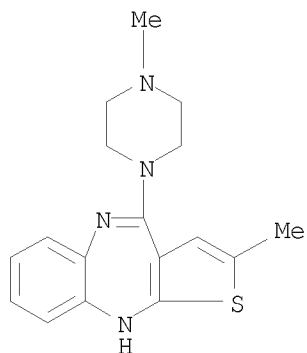
Double bond geometry as shown.



RN 861390-74-1 CAPLUS  
CN 10H-Thieno[2,3-b][1,5]benzodiazepine,  
2-methyl-4-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (2:1) (CA INDEX  
NAME)

CM 1

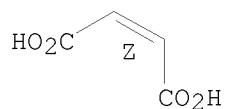
CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

CRN 110-16-7  
CMF C4 H4 O4

Double bond geometry as shown.



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 9 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:872664 CAPLUS

DOCUMENT NUMBER: 141:355325

TITLE: Novel forms of salts, co-crystals, and solvates of olanzapine and uses in treatment of psychosis and functional bowel disorders

INVENTOR(S): Hickey, Magali Bourghol; Remenar, Julius

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA

SOURCE: PCT Int. Appl., 62 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004089313	A2	20041021	WO 2004-US9947	20040331
WO 2004089313	A3	20051124		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
WO 2004078161	A1	20040916	WO 2003-US27772	20030904
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
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US 20070026078	A1	20070201	US 2003-660202	20030911
WO 2004060347	A2	20040722	WO 2003-US41642	20031229
WO 2004060347	A3	20041104		
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US 20070015841	A1	20070118	US 2003-747742	20031229
WO 2004078163	A2	20040916	WO 2004-US6288	20040226
WO 2004078163	A3	20050120		

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 GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC,  
 LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI  
 RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE,  
 BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU,  
 MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN,  
 GQ, GW, ML, MR, NE, SN, TD, TG

US 20060140985 A1 20060629 US 2005-541703 20050708  
 US 20060223794 A1 20061005 US 2005-551014 20050929

PRIORITY APPLN. INFO.:

US 2003-459501P P 20030401  
 US 2003-486713P P 20030711  
 US 2003-487064P P 20030711  
 WO 2003-US27772 A 20030904  
 US 2003-660202 A 20030911  
 US 2003-747742 A 20031229  
 WO 2003-US41642 A 20031229  
 WO 2004-US6288 A 20040226  
 US 2004-548343P P 20040227  
 US 2002-356764P P 20020215  
 US 2002-360768P P 20020301  
 US 2002-380288P P 20020515  
 US 2002-384152P P 20020531  
 US 2002-390881P P 20020621  
 US 2002-406974P P 20020830  
 US 2002-232589 A1 20020903  
 US 2002-426275P P 20021114  
 US 2002-427086P P 20021115  
 US 2002-295995 A3 20021118  
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 US 2003-441335P P 20030121  
 US 2003-444315P P 20030131  
 US 2003-451213P P 20030228  
 US 2003-378956 A 20030303  
 WO 2003-US6662 A 20030303  
 US 2003-456027P P 20030318  
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 US 2003-463962P P 20030418  
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 US 2003-601092 A2 20030620  
 WO 2003-US19574 A 20030620  
 US 2003-637829 A2 20030808  
 WO 2003-US28982 A 20030916  
 US 2003-508208P P 20031002  
 WO 2003-US41273 A 20031224  
 US 2004-747742 A1 20031229  
 WO 2004-US400 W 20040108  
 US 2004-542752P P 20040206  
 WO 2004-US9947 W 20040331

AB The invention provides novel soluble forms of olanzapine including novel salts, co-crystals, and solvates of olanzapine. Novel olanzapine forms of the invention are stable, readily formulated, and exhibit improved aqueous solubility when compared to known olanzapine forms. The invention also

10/551,014

provides novel pharmaceutical compns. comprising these novel soluble forms and related methods of treatment. Compns. and methods of the invention are useful in the treatment of psychosis and functional bowel disorders, including irritable bowel syndrome.

IT 756835-49-1P

RL: SPN (Synthetic preparation); PREP (Preparation)

(novel forms of salts, co-crystals, and solvates of olanzapine and uses in treatment of psychosis and functional bowel disorders)

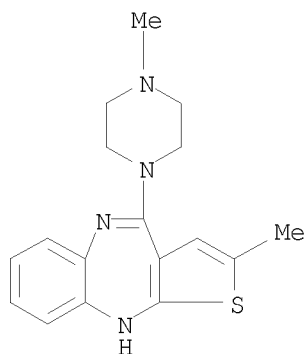
RN 756835-49-1 CAPLUS

CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:?) (CA INDEX NAME)

CM 1

CRN 132539-06-1

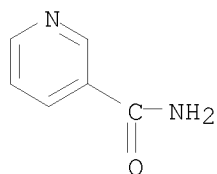
CMF C17 H20 N4 S



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



IT 724433-99-2P 777081-25-1P 777081-27-3P

777081-28-4P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(novel forms of salts, co-crystals, and solvates of olanzapine and uses in treatment of psychosis and functional bowel disorders)

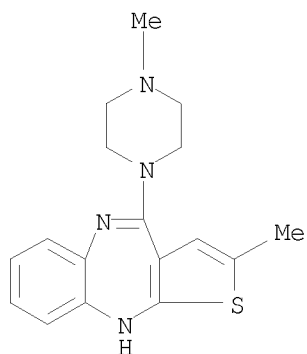
RN 724433-99-2 CAPLUS

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10/551,014

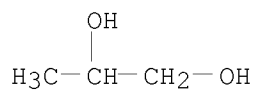
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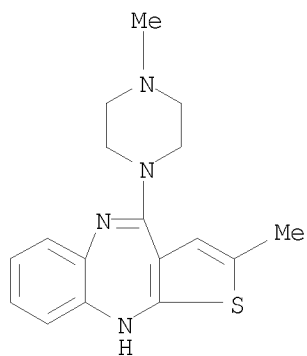
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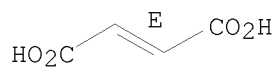
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CRN 110-17-8

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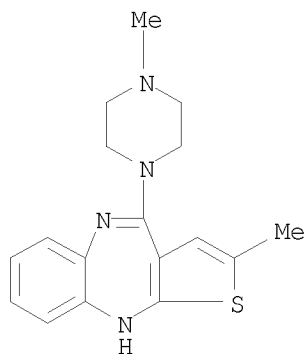
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2-methyl-4-(4-methyl-1-piperazinyl)-, (2Z)-2-butenedioate (9CI) (CA INDEX  
NAME)

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CRN 132539-06-1

CMF C17 H20 N4 S

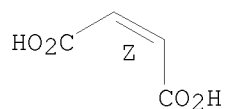


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CRN 110-16-7

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Double bond geometry as shown.



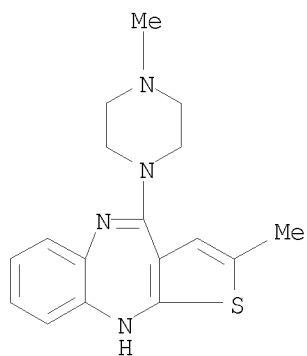
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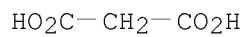
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CM 2

CRN 141-82-2  
CMF C3 H4 O4



L57 ANSWER 10 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:754425 CAPLUS  
 DOCUMENT NUMBER: 141:282789  
 TITLE: Pharmaceutical cocrystals of active ingredients  
 INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Moulton, Brian; Rodriguez-Hornedo, Nair  
 PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of Michigan; Zaworotko, Michael J.  
 SOURCE: PCT Int. Appl., 561 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
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US	2004-926842	A	20040826
WO	2004-US28456	W	20040901
WO	2004-US29013	W	20040904

AB A pharmaceutical composition comprises a cocrystal of an active pharmaceutical ingredient (API) and a cocrystal former hydrogen bonded to each other, wherein the API has at least 1 functional group selected om, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioketone, ester, carboxylic acid, amine, ammonia, imine, thiocyanate, cyanamide, oxime, nitro, S-heterocyclic ring, N-heterocyclic ring, or pyrrole and the co-crystal former has at least 1 functional group selected om, e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone, such that the API and cocrystal former are capable of cocrystg. om a solution phase under crystallization conditions. The

co-crystals have

better solubility, dose response, dissoln., bioavailability, stability or hygroscopicity than the API. Thus, co-crystals of celecoxib and nicotinamide (1:1 molar ratio) were prepared by mixing the acetone solution of the 2 and allowing the solution to evaporate slowly overnight.

IT 756835-49-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(pharmaceutical cocrystals of active ingredients)

RN 756835-49-1 CAPLUS

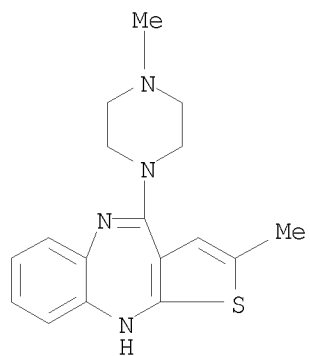
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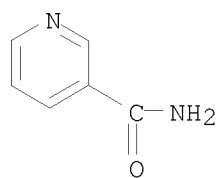
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CM 2

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L57 ANSWER 11 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:754423 CAPLUS

DOCUMENT NUMBER: 141:282787

TITLE: Pharmaceutical cocrystal compositions of drugs such as carbamazepine, celecoxib, and olanzapine

INVENTOR(S): Almarsson, Oern; Bourghol Hickey, Magali; Peterson, Matthew; Zaworotko, Michael J.; Moulton, Brian; Rodriguez-Hornedo, Nair

PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA; University of South Florida; The Regents of the University of Michigan

SOURCE: PCT Int. Appl., 489 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 18

PATENT INFORMATION:

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WO 2004078163	A3	20050120		
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US 20050070551	A1	20050331	US 2004-926842	20040826
US 7446107	B2	20081104		
AU 2004270238	A1	20050317	AU 2004-270238	20040904
CA 2534664	A1	20050317	CA 2004-2534664	20040904
WO 2005023198	A2	20050317	WO 2004-US29013	20040904
WO 2005023198	A3	20050714		
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CN 1874993	A	20061206	CN 2004-80031982	20040904
JP 2007513867	T	20070531	JP 2006-525508	20040904
US 20060134198	A1	20060622	US 2005-541216	20050629
US 20060140985	A1	20060629	US 2005-541703	20050708
US 20070059356	A1	20070315	US 2005-546963	20050826
US 20060223794	A1	20061005	US 2005-551014	20050929
IN 2006KN00371	A	20070622	IN 2006-KN371	20060220
KR 2006128831	A	20061214	KR 2006-704425	20060303

US 20070021510  
PRIORITY APPLN. INFO.:

A1 20070125

US 2006-570405		20060303
US 2003-451213P	P	20030228
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US 2003-463962P	P	20030418
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US 2002-406974P	P	20020830
US 2002-232589	A1	20020903
US 2002-426275P	P	20021114
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US 2002-295995	A3	20021118
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US 2003-439283P	P	20030110
US 2003-441335P	P	20030121
US 2003-444315P	P	20030131
WO 2003-US6662	A	20030303
US 2003-456027P	P	20030318
US 2003-456608P	P	20030321
US 2003-459501P	P	20030401
US 2003-449307	A2	20030530
WO 2003-US17184	A2	20030530
US 2003-601092	A2	20030620
WO 2003-US19574	A	20030620
US 2003-486713P	P	20030711
US 2003-637829	A2	20030808
WO 2003-US27772	W	20030904
US 2003-660202	A	20030911
WO 2003-US28982	A	20030916
US 2003-508208P	P	20031002
WO 2003-US41273	W	20031224
US 2003-747742	A	20031229
US 2004-747742	A1	20031229
WO 2003-US41642	A	20031229
WO 2004-US400	W	20040108
US 2004-542752P	P	20040206
WO 2004-US6288	W	20040226
US 2004-548343P	P	20040227
WO 2004-US9947	W	20040331
US 2004-560411P	P	20040406
US 2004-573412P	P	20040521
US 2004-579176P	P	20040612
US 2004-581992P	P	20040622
US 2004-586752P	P	20040709
US 2004-588236P	P	20040715
US 2004-590590P	P	20040723
WO 2004-US29013	W	20040904

AB A pharmaceutical composition comprising a cocrystal of an active pharmaceutical ingredient (API) and a cocrystal forming compound wherein the API has at least 1 functional group selected from, e.g., ether, thioether, alc., thiol, aldehyde, ketone, thioketone, nitrate ester, phosphate ester,

thiophosphate ester, ester, thioester, amine, secondary amine, ammonia, imidazole, or pyridine and the co-crystal forming compound has at least 1 functional group selected from e.g., amine, amide, pyridine, imidazole, indole, pyrrolidine, carbonyl, carboxyl, hydroxyl, phenol, or sulfone,, such that the API and cocrystal forming compound are capable of

co-crystallizing

from a solution phase under crystallization conditions. Thus, carbamazepine

and

p-phthalaldehyde were dissolved in MeOH and slow evaporation of the solvent gave 1:1 carbamazepine-p-phthalaldehyde cocrystals. The cocrystals were characterized by powder x-ray diffraction, DSC and IR spectrometry.

IT 756835-49-1P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(pharmaceutical cocrystal compns. of drugs such as carbamazepine and celecoxib and olanzapine)

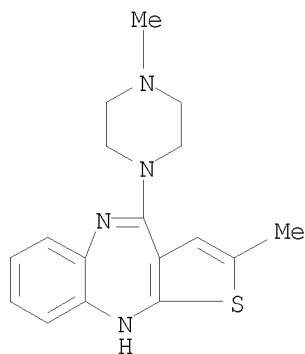
RN 756835-49-1 CAPLUS

CN 3-Pyridinecarboxamide, compd. with  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine  
(1:?) (CA INDEX NAME)

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CRN 132539-06-1

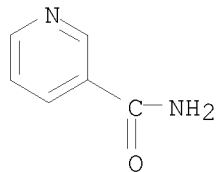
CMF C17 H20 N4 S



CM 2

CRN 98-92-0

CMF C6 H6 N2 O



REFERENCE COUNT:

5

THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS

10/551,014

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 12 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2004:589401 CAPLUS  
 DOCUMENT NUMBER: 141:128859  
 TITLE: Pharmaceutical propylene glycol solvate compositions  
 INVENTOR(S): Tawa, Mark; Almarsson, Oern; Remenar, Julius  
 PATENT ASSIGNEE(S): Transform Pharmaceuticals, Inc., USA  
 SOURCE: PCT Int. Appl., 317 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 18  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004060347	A2	20040722	WO 2003-US41642	20031229
WO 2004060347	A3	20041104		
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WO 2004026235	A2	20040401	WO 2003-US28982	20030916
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 WO 2004089313 A3 20051124  
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 US 20060140985 A1 20060629 US 2005-541703 20050708  
 US 20060223794 A1 20061005 US 2005-551014 20050929  
 PRIORITY APPLN. INFO.: US 2002-232589 A 20020903  
 US 2002-437516P P 20021230  
 US 2003-441335P P 20030121  
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WO 2003-US41642	W 20031229
WO 2004-US400	W 20040108
WO 2004-US6288	A 20040226
US 2004-548343P	P 20040227
WO 2004-US9947	W 20040331

AB The invention relates to pharmaceutical compns. comprising propylene glycol solvates of active pharmaceutical ingredients (APIs) which are hygroscopic or has low aqueous solubility. The composition comprises solvate characterized by (i) the mole ratio of propylene glycol to API in the range of 0.25 to 2; (ii) a crystalline form, (iii) a powder X-ray diffraction spectrum which differs from the corresponding powder X-ray diffraction spectrum of the unsolvated API by at least one property, (iv) stability to temps. of up to 50° under a stream of gas in a thermogravimetric anal. apparatus, (v) the API is optionally in the form of a metal salt, such as an alkali or an alkaline earth metal salt, (vi) the API has low aqueous solubility and

is selected from steroid drugs, and (vii) the composition further comprises a pharmaceutically-acceptable diluent, excipient or carrier. A method for preparing a propylene glycol solvate of an API comprises (a) contacting propylene glycol with an API in solution, (b) crystallizing a propylene glycol solvate of the API from the solution, and (c) isolating the solvate. For example, to a solution of celecoxib (253 mg, 0.664 mmol) in di-Et ether (6 mL) was added propylene glycol (0.075 mL, 102 mmol). To the clear solution was added potassium t-butoxide in THF (1 M, 0.66 mL, 0.66 mmol). Crystals immediately began to form and after 5 min the solid had completely crystallized. The crystalline salt form was found to be a 1:1 propylene glycol solvate of celecoxib potassium salt.

IT 724433-99-2P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation and compns. of propylene glycol solvates with hygroscopic or low soluble drugs)

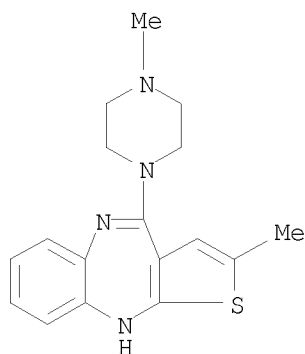
RN 724433-99-2 CAPLUS

CN 1,2-Propanediol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:?) (CA INDEX NAME)

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CRN 132539-06-1

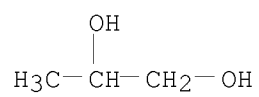
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10/551,014

CM 2

CRN 57-55-6  
CMF C3 H8 O2





10/551,014

L57 ANSWER 13 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:1002481 CAPLUS

DOCUMENT NUMBER: 140:278676

TITLE: 2-Methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine methanol solvate

AUTHOR(S): Wawrzycka-Gorczyca, Irena; Mazur, Liliana; Koziol, Anna E.

CORPORATE SOURCE: Faculty of Chemistry, Maria Curie-Sklodowska University, Lublin, 20031, Pol.

SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2004), E60(1), o69-o71

CODEN: ACSEBH; ISSN: 1600-5368

PUBLISHER: International Union of Crystallography

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The title compound, C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S·CH<sub>4</sub>O, is an olanzapine 1:1 MeOH solvate. Crystallog. data are given. A pair of olanzapine mols. forms a centrosym. dimer with intermol. C-H... $\pi$  interactions. Intermol. host-host N-H...N H bonds were not found. The guest mol. is linked to host mols. through O-H...N, N-H...O and C-H...O H bonds.

IT 182808-49-7

RL: PRP (Properties)

(crystal structure of)

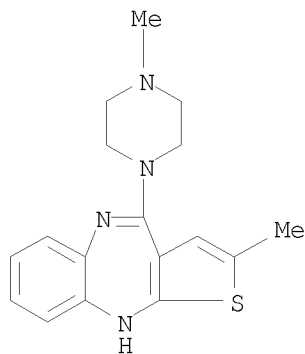
RN 182808-49-7 CAPLUS

CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C<sub>17</sub> H<sub>20</sub> N<sub>4</sub> S



CM 2

CRN 67-56-1

CMF C H<sub>4</sub> O

H<sub>3</sub>C-OH

10/551,014

REFERENCE COUNT: 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 14 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:681542 CAPLUS

DOCUMENT NUMBER: 140:10936

TITLE: 2-Methyl-4-(4-methylpiperazin-1-yl)-10H-thieno[2,3-b][1,5]benzodiazepine methanol solvate monohydrate

AUTHOR(S): Capuano, Ben; Crosby, Ian T.; Fallon, Gary D.; Lloyd, Edward J.; Yuriev, Elizabeth; Egan, Simon J.

CORPORATE SOURCE: Victorian College of Pharmacy, Department of Medicinal Chemistry, Monash University (Parkville Campus), Victoria, 3052, Australia

SOURCE: Acta Crystallographica, Section E: Structure Reports Online (2003), E59(9), o1367-o1369  
CODEN: ACSEBH; ISSN: 1600-5368

PUBLISHER: International Union of Crystallography

DOCUMENT TYPE: Journal; (online computer file)

LANGUAGE: English

AB The thienobenzodiazepine nucleus of the title compound, olanzapine MeOH solvate monohydrate, C<sub>17</sub>H<sub>20</sub>N<sub>4</sub>S·CH<sub>4</sub>O·H<sub>2</sub>O, is buckled, with the central seven-membered heterocycle in a boat conformation and the dihedral angle between the planes of the aromatic rings being 118°. The piperazine ring displays an almost perfect chair conformation with the Me group assuming an equatorial orientation. The relative position of the thienobenzodiazepine and piperazine ring system is controlled by the planarity of the piperazine N in the amidine moiety. Crystallog. data are given.

IT 628722-44-1

RL: PRP (Properties)  
(crystal structure of)

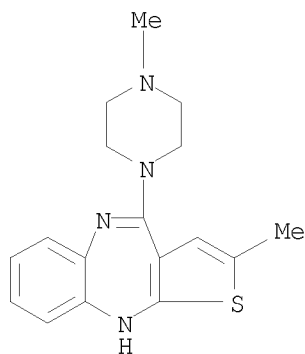
RN 628722-44-1 CAPLUS

CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine, hydrate (1:1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1

CMF C17 H20 N4 S



CM 2

CRN 67-56-1

CMF C H4 O

10/551,014

H<sub>3</sub>C—OH

REFERENCE COUNT:           13     THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 15 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:227510 CAPLUS

DOCUMENT NUMBER: 132:256034

TITLE: 2-Methylthienobenzodiazepine formulation

INVENTOR(S): Bunnell, Charles Arthur; Ferguson, Thomas Harry;  
Hendriksen, Barry Arnold; Sanchez-Felix, Manuel  
Vicente; Tupper, David Edward

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018408	A1	20000406	WO 1999-US6417	19990324
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6169084	B1	20010102	US 1998-163769	19980930
CA 2344873	A1	20000406	CA 1999-2344873	19990324
AU 9933627	A	20000417	AU 1999-33627	19990324
AU 759751	B2	20030501		
BR 9914156	A	20010626	BR 1999-14156	19990324
EP 1119359	A1	20010801	EP 1999-915009	19990324
EP 1119359	B1	20040526		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
TR 200100885	T2	20010821	TR 2001-885	19990324
HU 2001003636	A2	20020128	HU 2001-3636	19990324
HU 2001003636	A3	20030528		
JP 2002525330	T	20020813	JP 2000-571926	19990324
NZ 510208	A	20030429	NZ 1999-510208	19990324
CN 1146422	C	20040421	CN 1999-811535	19990324
AT 267602	T	20040615	AT 1999-915009	19990324
PT 1119359	T	20040831	PT 1999-915009	19990324
EP 1468689	A1	20041020	EP 2004-5832	19990324
EP 1468689	B1	20070418		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL				
ES 2221376	T3	20041216	ES 1999-915009	19990324
IL 141766	A	20061231	IL 1999-141766	19990324
AT 359793	T	20070515	AT 2004-5832	19990324
SK 285944	B6	20071102	SK 2001-416	19990324
ES 2285294	T3	20071116	ES 2004-5832	19990324
PL 196821	B1	20080229	PL 1999-346981	19990324
TW 577890	B	20040301	TW 1999-88105028	19990402
ZA 2001002231	A	20020318	ZA 2001-2231	20010316
IN 2001CN00338	A	20050311	IN 2001-CN338	20010326
NO 2001001583	A	20010328	NO 2001-1583	20010328

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MX 2001003288	A	20011011	MX 2001-3288	20010329
HR 2001000238	A1	20020430	HR 2001-238	20010329
HR 2001000238	B1	20060531		
HK 1041199	A1	20050318	HK 2002-100774	20020131

PRIORITY APPLN. INFO.:

US 1998-163768	A	19980930
US 1998-163769	A	19980930
US 1997-60493P	P	19970930
EP 1999-915009	A3	19990324
WO 1999-US6417	W	19990324

AB The invention provides a pharmaceutically acceptable oleaginous or cholesterol microsphere formulation of olanzapine or olanzapine pamoate or solvates. Thus, olanzapine was prepared and mixed with cholesterol in methylene chloride. An aqueous solution of PVA was added to the above solution and

the mixture was passed through 100- and 230-mesh sieves, and the particles thus obtained were allowed to dry.

IT 221373-12-2P

RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(methylthienobenzodiazepine formulations)

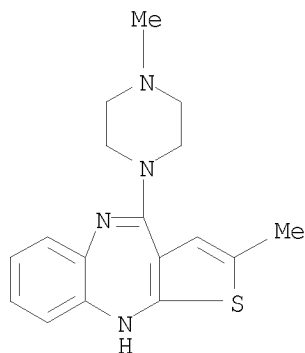
RN 221373-12-2 CAPLUS

CN 2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with methanol and 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:2:1) (9CI) (CA INDEX NAME)

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CRN 132539-06-1

CMF C17 H20 N4 S

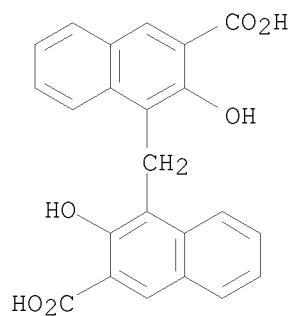


CM 2

CRN 130-85-8

CMF C23 H16 O6

10/551,014



CM 3

CRN 67-56-1  
CMF C H4 O

$\text{H}_3\text{C}-\text{OH}$

REFERENCE COUNT:

1

THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 16 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1999:233762 CAPLUS

DOCUMENT NUMBER: 130:257362

TITLE: Methylthienobenzodiazepine derivative antipsychotic drug formulation.

INVENTOR(S): Allen, Douglas James; Dekemper, Kurt Douglas; Ferguson, Thomas Harry; Garvin, Stuart James; Murray, Linda Cameron; Brooks, Norman Dale; Bunnell, Charles Arthur; Hendriksen, Barry Arnold; Mascarenhas, Snehlata Singh; Shinkle, Sharon Louise; Sanchez-Felix, Manuel Vicente; Tupper, David Edward

PATENT ASSIGNEE(S): Eli Lilly and Company, USA

SOURCE: PCT Int. Appl., 72 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9916313	A1	19990408	WO 1998-US20426	19980930
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2304568	A1	19990408	CA 1998-2304568	19980930
CA 2304568	C	20080812		
AU 9895914	A	19990423	AU 1998-95914	19980930
AU 752552	B2	20020919		
EP 1018880	A1	20000719	EP 1998-949632	19980930
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
BR 9813228	A	20000829	BR 1998-13228	19980930
HU 2000004534	A2	20010528	HU 2000-4534	19980930
TR 200000812	T2	20010723	TR 2000-812	19980930
JP 2001517685	T	20011009	JP 2000-513467	19980930
NZ 503641	A	20020927	NZ 1998-503641	19980930
CN 1239158	C	20060201	CN 1998-809565	19980930
IL 135295	A	20061031	IL 1998-135295	19980930
MX 2000003040	A	20001110	MX 2000-3040	20000328
NO 2000001631	A	20000530	NO 2000-1631	20000329
HR 2000000181	A1	20001231	HR 2000-181	20000331
HR 2000000181	B1	20060731		
US 20030027816	A1	20030206	US 2002-136887	20020501
US 6617321	B2	20030909		
US 20040097489	A1	20040520	US 2003-613619	20030703
US 7303764	B2	20071204		
PRIORITY APPLN. INFO.:			US 1997-60493P	P 19970930
			WO 1998-US20426	W 19980930
			US 2000-509757	B1 20000329
			US 2002-136887	A1 20020501

AB The invention provides a pharmaceutically acceptable oleaginous or



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cholesterol microsphere formulation of  
2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2.3-b][1.5]benzodiazepine  
(olanzapine) (preparation given) or olanzapine pamoate or solvates thereof.  
The invention further provides novel olanzapine pamoate salts or solvates  
thereof.

IT 221373-12-2P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological  
study); PREP (Preparation); USES (Uses)  
(preparation and formulation of)

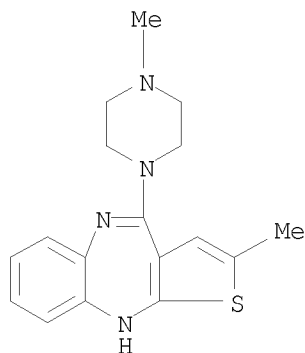
RN 221373-12-2 CAPLUS

CN 2-Naphthalenecarboxylic acid, 4,4'-methylenebis[3-hydroxy-, compd. with  
methanol and 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-  
b][1,5]benzodiazepine (1:2:1) (9CI) (CA INDEX NAME)

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CRN 132539-06-1

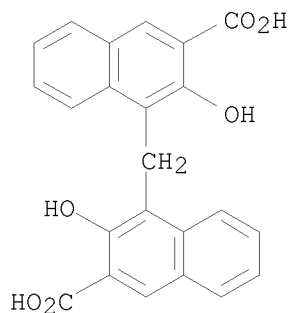
CMF C17 H20 N4 S



CM 2

CRN 130-85-8

CMF C23 H16 O6



CM 3

10/551,014

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C—OH

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L57 ANSWER 17 OF 17 CAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1996:656468 CAPLUS  
 DOCUMENT NUMBER: 125:301028  
 ORIGINAL REFERENCE NO.: 125:56347a,56350a  
 TITLE: Preparation of olanzapine solvates  
 INVENTOR(S): Bunnell, Charles Arthur; Hendriksen, Barry Arnold;  
 Hotten, Terrence Michael; Larsen, Samuel Dean; Tupper,  
 David Edward  
 PATENT ASSIGNEE(S): Eli Lilly and Co., USA; Lilly Industries Ltd.  
 SOURCE: Eur. Pat. Appl., 16 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 733634	A1	19960925	EP 1996-301999	19960322
EP 733634	B1	20001122		
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
US 5631250	A	19970520	US 1995-410474	19950324
US 5703232	A	19971230	US 1996-586431	19960116
EG 24221	A	20081110	EG 1996-253	19960312
WO 9630374	A1	19961003	WO 1996-US3854	19960322
W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI				
RW: KE, LS, MW, SD, SZ, UG, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9652578	A	19961016	AU 1996-52578	19960322
AU 9654279	A	19961016	AU 1996-54279	19960322
AU 706471	B2	19990617		
GB 2313835	A	19971210	GB 1997-19819	19960322
GB 2313835	B	19980916		
DE 19681286	T0	19980402	DE 1996-19681286	19960322
BR 9607790	A	19980707	BR 1996-7790	19960322
JP 11502535	T	19990302	JP 1996-529532	19960322
HU 9802824	A2	19990628	HU 1998-2824	19960322
HU 9802824	A3	20000128		
HU 224989	B1	20060529		
AT 9609021	A	20000115	AT 1996-9021	19960322
AT 406771	B	20000825		
IL 117613	A	20000716	IL 1996-117613	19960322
AT 197711	T	20001215	AT 1996-301999	19960322
ES 2151991	T3	20010116	ES 1996-301999	19960322
PT 733634	T	20010430	PT 1996-301999	19960322
EE 3489	B1	20010815	EE 1997-232	19960322
PL 183723	B1	20020731	PL 1996-322501	19960322
CZ 292688	B6	20031112	CZ 1997-3000	19960322
RO 118872	B1	20031230	RO 1997-1761	19960322
SK 284143	B6	20041005	SK 1997-1218	19960322
IN 1996CA00516	A	20060707	IN 1996-CA516	19960322
SE 9703205	A	19970905	SE 1997-3205	19970905
FI 9703750	A	19970922	FI 1997-3750	19970922
NO 9704365	A	19970922	NO 1997-4365	19970922

10/551,014

NO 314663	B1	20030428		
DK 9701089	A	19971112	DK 1997-1089	19970923
IN 1999CA00383	A	20050311	IN 1999-CA383	19990423
GR 3035355	T3	20010531	GR 2001-400180	20010202

PRIORITY APPLN. INFO.:

	US 1995-409566	A	19950324
	US 1995-410474	A	19950324
	IN 1996-CA514	A3	19960322
	WO 1996-US3854	W	19960322
	WO 1996-US3917	W	19960322

AB The invention provides MeOH, EtOH, and PrOH solvates of olanzapine with improved properties characterized by x-ray spectra.

IT 182808-49-7P

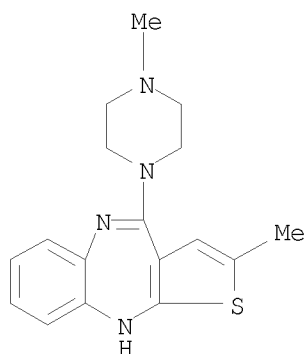
RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (preparation of olanzapine solvates)

RN 182808-49-7 CAPLUS

CN Methanol, compd. with 2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine (1:1) (CA INDEX NAME)

CM 1

CRN 132539-06-1  
CMF C17 H20 N4 S



CM 2

CRN 67-56-1  
CMF C H4 O

H<sub>3</sub>C—OH